



PRODUCT AND SPECIFICATION

VisionPro AP212

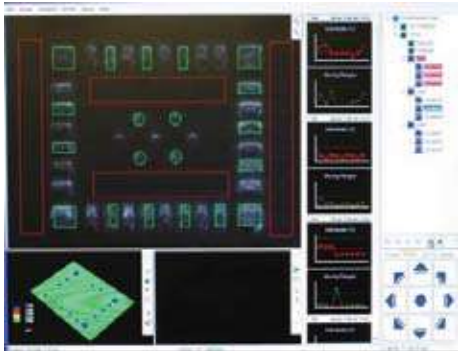
3D SOLDER PASTE INSPECTION



VisionPro AP212 incorporates high resolution, fully automated PCB positioning with sophisticated true **3D** sensor technology to provide the most repeatable and accurate solder paste inspection system in its class. The **AP212** eliminates operator handling issues associated with offline manual measurement techniques. Integrated SPC run charts and custom data reports makes the **AP212** an exceptional value for the electronics manufacturer concerned with finding a reliable SPI solution to improving production yields.

System Features: Best in Class Gage R&R • Best In Class Accuracy • Automatic Calculation of 7 Distinct Characteristics including Height, Area, Volume and Standard Deviation • Real-Time Integrated SPC with Defect Error Review • Custom Data Reports with Data Tag Analysis • True 3D Color - Photo Realistic Profiling • Offline Programming

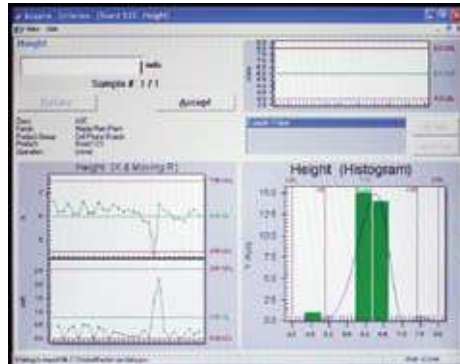
Automated Measurements



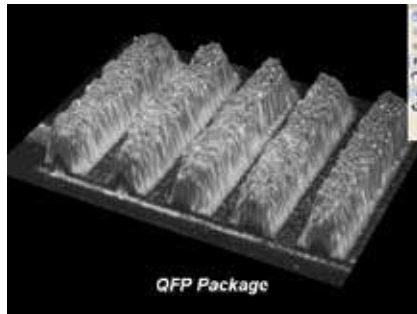
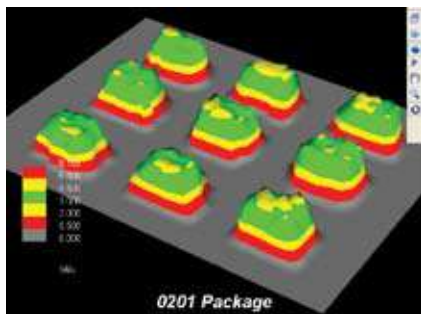
To obtain measurements on the **AP212**, the user programs the board to measure the desired locations. The user then selects the board from the board assembly list, verifies fiducial alignment and clicks run. Measurements are automatically recorded, SPC charts updated and a Pass / Fail with error review message is displayed upon completion of the script.

Advanced Defect Analysis

The optional Siemens® Criterion SPC software is a powerful tool that helps operators control the critical stencil printing process. Data collected by the **AP212** is instantly charted by the Criterion Software. Calculations crucial to understanding printing performance are reported.



True 3D Color - Photo Realistic Profiling



The **AP212** allows operators to obtain 3D color profiles for fast and accurate paste analysis. Operators may use these profiles to help them determine what corrections are needed in their solder paste printing process, thereby improving yields.

System includes:

- Standard 300mm x 300mm High Resolution Positioning System • 2.5 GHz+ CPU and 20"+ LCD Monitor • LED Light Source for Maintenance Free Operation • Hardware /Software Reference Manuals • Online Service and Support

Options:

- Siemens® SPC Software • NIST Calibration Standard • Up to 12" x 20" Extended Positioning System • Extended Warranty Plans • Large FOV Sensor

MECHANICAL SPECIFICATIONS

VisionPro 212

System Specifications

Maximum Object Thickness
Standard Work Surface (WxL)

Throat Depth (Sensor to Rear support)
System Computer
Electrical Requirements
Ambient Operating Temperature
Ambient Operating Humidity
System Weight
System Weight (CRATED)

Measurement Capability

SPC Charting/ Data Reports
Work Instruction

AP212

5.1 cm (2.0 inches)
41 x 53 cm (16 x 21in.)
(Custom Size Available)
38 cm (15 inches)
2.5 GHz, 1.0 Gb ram, Windows XP / 7
100 - 240 VAC, 50 - 60 Hz, 2 Amps
5 to 38 C (40 to 100F)
<90% Non Condensing
36 Kg (80 lbs)
59 Kg (130 lbs)
(Not including PC & Monitor)
Height, Volume, Area, Width, Length,
3D Defect Analysis
Integrated
Built In

Sensor Specifications

Measurement Principal
Camera (Pixel)
Lateral Resolution
FOV Size
Z Resolution
Measurement Range
Illumination

3D Phase Shift Moiré
640 x 480 Color CCD
4.3 um (.17 mils)
2.8 mm x 2.1 mm (110 mils x 83 mils)
1.78 um (.07 mils)
365 um (14.4 mils)
LED Based White Light

Inspection Performance

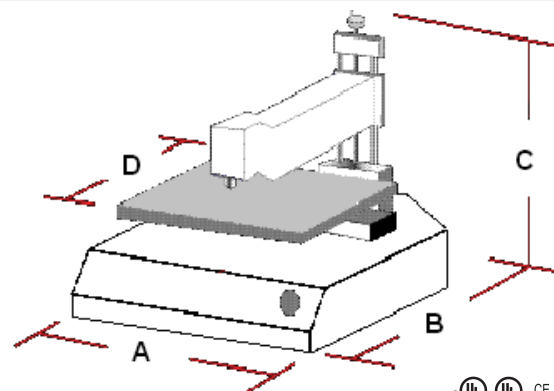
Inspection Speed
Static Repeatability
Gage R & R (+/- 50% tolerance on PCB)
Height Accuracy on cal target
Minimum Paste Deposit Size (X,Y)

1 Second FOV 3D
1 um (.04 mils)
<10%
1 um (.04 mils)
51 um (2 mils)

Optional Large FOV: AP450

Camera
Lateral Resolution
FOV Size
Z Resolution
Measurement Range

1280 x 1024 Color CMOS
6.8 um (.27 mils)
8.7 mm x 6.2 mm (343 mils x 242 mils)
1.78 um (.07 mils)
488 um (19.2 mils)



Dimensions

A: 56cm (22") B: 61cm (24") C: 43cm (17") D: 36cm (14")

VisionPro - Light Years Ahead



For More Information:

ASC International
1799 County Road 90, Suite 6
Maple Plain, MN 55359 U.S.A.

Toll Free: 1-888-478-2912 (USA ONLY)
Tel: USA 763-479-6210
Fax USA 763-479-6206

E-mail: info@ascinternational.com
Web: www.ascinternational.com
www.solderpasteinspection.com